

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

TruePosition, Inc.,)	
)	
Plaintiff/)	
Counterclaim-Defendant,)	
)	Civil Action No. 05-747-SLR
v.)	
)	
Andrew Corporation,)	
)	
Defendant/)	
Counterclaim-Plaintiff.)	
)	

**TRUEPOSITION'S BRIEF IN OPPOSITION TO ANDREW'S MOTION FOR
SUMMARY JUDGMENT OF NON-INFRINGEMENT**

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I. NATURE AND STAGE OF THE PROCEEDINGS

This is a patent infringement action. TruePosition, Inc. (“TruePosition”) asserts that Andrew Corporation (“Andrew”) has infringed U.S. Patent 5,327,144 by offering, using and supplying from the United States Andrew’s “Geometrix Wireless Location System” (“Geometrix”).

TruePosition filed this suit on October 25, 2005 (D.I. 1). The pleadings closed on July 5, 2006 (D.I. 53). Fact discovery closed on November 17, 2006 (D.I. 94, ¶4). Expert discovery closed on January 24, 2007 (D.I. 94, ¶5).

On January 19, 2006, the parties filed a Joint Claim Construction Statement (“JCCS”) setting forth their respective proposed constructions of the claims (D.I. 130) pursuant to the Court’s Scheduling Order. Two weeks later, the parties filed Opening Claim Construction Briefs in support of their respective JCCS constructions (D.I. 142, 149). Inexplicably, on the same day, Andrew filed a motion for summary judgment of non-infringement based upon a construction of the claim phrase “**reverse control channel**” that differs materially from the construction it offered in the JCCS or in its opening claim construction brief (D.I. 148). TruePosition now opposes Andrew’s motion.

II. SUMMARY OF ARGUMENT

The Court should deny Andrew’s motion for summary judgment. TruePosition has proven infringement using clear evidence under a straightforward and legally correct construction of the claims offered in the Parties’ Joint Claim Construction Statement.

By contrast, Andrew’s positions continue to be a moving target. Andrew offers a construction of the phrase “**reverse control channel**” that differs from the construction that offered in the JCCS. Andrew is not entitled to summary judgment under its new proposed construction of the phrase “**reverse control channel(s)**.” That construction is untimely, legally

erroneous and, even if the Court were inclined to adopt it, there is persuasive evidence of infringement under that proposed construction.

Andrew now claims that the phrase “**reverse control channel**” should be construed to mean “one way” channels that transmit “only” in the “**reverse**” direction that “*cannot*” transmit in the forward direction. But that construction excludes the preferred embodiment in the specification, conflicts with file history and, even if it did not, there is persuasive evidence of infringement under Andrew’s construction. At a minimum, the evidence that TruePosition has presented raises a genuine fact issue as to whether Standalone Dedicated Control Channels are “one way” channels.

Andrew also continues to assert that the phrase “**reverse control channel**” should be construed to require channels that transmit “*only signaling*” information and not user data. But that construction of the phrase “**reverse control channel**” would also exclude the preferred embodiment of the specification. Even if it did not, there is persuasive evidence of infringement under that construction. At a minimum the evidence that TruePosition has presented raises a genuine fact issue.

Andrew also now claims that the phrase “**reverse control channel**” should be construed to mean a “shared” channel that “has a many to one property in that many mobile phones are simultaneously allocated to and use the same reverse control channel to communicate with one base station.” But there is no support for this construction in the intrinsic patent record. The only evidence that Andrew has offered in support of this construction is a conclusory expert declaration that the Court should disregard.

Finally, even if the Court were inclined to adopt Andrew’s proposed constructions, and even if there were no literal infringement under those constructions, there would still be a

genuine issue fact as to whether there is infringement by equivalents. The limitations in Andrew's proposed constructions of the phrase "**reverse control channel**" are tangential to the reason that the inventors amended the patent claims during prosecution.

III. COUNTER STATEMENT OF MATERIAL FACTS

A. Andrew Now Relies Upon a Construction of the Claims that Differs from the Construction that Andrew Offered in the Joint Claim Construction Statement

Andrew's claim construction positions continue to be a moving target. During expert discovery, Andrew vacillated not only on the question of how the Patent claim terms and phrases should be construed, but also on the question of which claim terms should be construed (D.I. 142 at pp. 1-2). In recent weeks, Andrew's flip-flopping on the issue of claim construction has made it difficult to discern where Andrew currently stands on the question of how the claims should be construed.

At his deposition, Andrew's technical expert, Dr. David Goodman was unable to provide a final construction of the claim phrase "**reverse control channel**" (B456-B457, p.21 l.11 –p.21 l.6); (B460) but did provide a "preliminary" construction (B456-57, p.20 l.11 – p.22 l.6);(B460). He testified that the phrase "**reverse control channel**" should be construed to mean a channel that transmitted data in "the format specified in American National Standard 553" (*id.*), a specific digital data format (B456. p. 21, ll. 21-23).

Four days later, Andrew offered a revised version of Dr. Goodman's construction to the Court in the parties JCCS. In its revised construction, Andrew now interpreted the phrase "**reverse control channel**" to require a channel that conveyed "only signaling" information as opposed to "user information."

Goodman's "Preliminary" 1/15/06 Construction	Andrew's 1/19/06 Joint Claim Construction Statement Construction
"A logical channel that conveys information from one or more mobile stations to one base station using the format specified in American National Standard 553" (B460)	"A channel that carries <i>only signaling</i> information from a mobile terminal to a base station in the format specified in ANSI 553" (D.I. 130 at 2) (emphasis supplied)

Two weeks later, the parties submitted Opening Claim Construction briefs in support of their proposed constructions set forth in the JCCS (D.I. 142; D.I. 149). At the same time, Andrew filed its motion for summary judgment of non-infringement (D.I. 147). That motion relies upon a significantly narrower construction of the phrase "**reverse control channel**" that includes two limitations that Andrew did not include in the construction that Andrew proposed in the JCCS. Andrew now asserts that the phrase "**reverse control channel**" should be limited to mean a "*one way*" channel that "*only*" transmits from a cellular telephone to a cell site and that "*cannot*" transmit information in the forward direction (D.I. 148 at p. 6, ¶¶16-17).

Andrew's 1/19/06 Joint Claim Construction Statement Construction	Andrew's 02/02/07 Summary Judgment Construction
<p>"A channel that carries only signaling information from a mobile terminal to a base station in the format specified in ANSI 553" (D.I. 130 at 2).</p>	<p>[1] "a <i>one way</i> channel that communicates information <i>only</i> from a cellular telephone to a base station," and that "<i>cannot</i> communicate information from a base station to a cellular phone"</p> <p>[and]</p> <p>[2] that carries only "signaling information, not voice or traffic information such as user data,"</p> <p>[and]</p> <p>[3] that is a "<i>shared channel</i>" that "<i>has a many to one property in that many mobile phones are simultaneously allocated to and use the same reverse control channel to communicate with one base station</i>"</p> <p>(D.I. 148 at ¶¶16-17, 19, 25)(emphasis supplied)</p>

Andrew's proposed construction of the phrase "**reverse control channel**" in the JCCS did not specify a "*one way*" channel (D. I. 130 at 2). It merely specified a channel that transmits information "from a mobile terminal to a base station" (D.I. 130 at 2). Andrew's shift in position is significant because it is undisputed that Standalone Dedicated Control Channels, such as those used in GSM networks carry information "from a mobile to a base station" (D.I. 148 at p. 9, ¶31; B126 at p. 68, l. 5 – p. 71, l. 23; B458 at p. 87, ll. 1-21; B415 at p. 25, ll. 1-14; Gottesman Report at 31, 35, fn. 87). Despite claiming that its "*one way*" channel limitation is already included in both parties' JCCS constructions, Andrew now offers various items of evidence to purportedly prove that a "**reverse control channel**" is a "*one way*" channel (D.I. 148 at p. 6-7, ¶17).

Andrew also now construes the phrase “**reverse control channel**” to mean a “*shared channel*” that “*has a many to one property in that many mobile phones are simultaneously allocated to and use the same reverse control channel to communicate with one base station*” (D.I. 148 at p. 8, ¶25). Andrew’s proposed construction of the phrase “**reverse control channel**” in the JCCS did not include this limitation (D.I. 130 at 2).

Andrew not only offers a new construction of the phrase “**reverse control channel**,” but, at the same time, presents this new position on a pure issue of law as an “undisputed fact” (D.I. 148 at ¶¶16-17, 19, 25). TruePosition disputes Andrew’s summary judgment construction of the phrase “**reverse control channel**” and has demonstrated that Andrew’s summary judgment claim construction is wrong as a matter of law in section IV, C, 2 below.

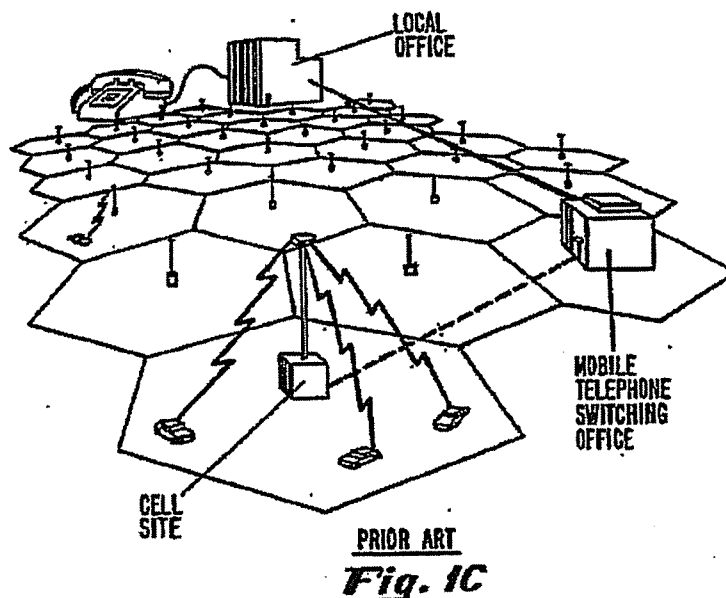
Andrew also claims that its proposed JCCS construction of the phrase “**reverse control channel**” is an undisputed fact (D.I. 148 at p. 6, ¶15). But TruePosition disputes that proposed construction for the reasons set forth in TruePosition’s Opening Claim Construction Brief.

B. Background of the Relevant Technology

1. Cellular Networks

a) The Cellular Network Infrastructure

Cellular networks typically include many cell sites, *e.g.*, antennas that are mounted on towers (B567, B672); (B2 at Fig. 1C). It is undisputed that such cell sites are also sometimes called “base stations” (B459 at Tr. 97:19-21). Cellular phones communicate with other cellular phones in the network using these cell sites (B567, 672). Each cell site is assigned a service area that is shaped like a hexagon and that is therefore called a “cell” (B567, B17 at Col. 1, ll. 44-46).



b) Cellular Network Communication Over “Channels”

When cellular phones communicate with cell sites, they use wireless “channels” (B567, ¶6). In cellular networks these channels transmit information using electromagnetic waves that oscillate at particular frequency bands called radio frequencies (“RF”) (B566 at p. 5, ¶¶5-6). In cellular networks, each channel from a cell phone to a cell site is defined in whole or in part by the particular frequency that the channel uses to transmit information (B567, ¶6).

Cellular telephone networks use two types of channels to communicate information, “control channels” and “voice channels” (B567 at p. 6, ¶7; B17 at col. 1, l. 68 – Col. 2, l. 8). “Control channels” typically carry control information to help control the operations of the network, such as, for example, information for establishing a voice communication link between the phone and the cell network (B567 at p. 6, ¶7; B18 at col. 3, ll. 33-40). “Voice channels” transmit the voice signals that a user generates during a call (B567, ¶7).

Cellular channels transmit information both to and from cellular telephones (B567, ¶6; B18 at Co. 2, ll. 15-19). Channels that transmit information from a cell site to a cellular

telephone are called “forward” channels (*id.*). Channels that transmit information from a cellular telephone to a cell site are called “reverse” channels (*id.*).

c) Cellular Network Communication Protocols

Cellular networks use different protocols that describe the details of how the cellular telephone system transmits and receives information (B568 p. 7, ¶1; B18 at Col. 4, ll. 42-45). Sometimes these protocols are called “air interfaces” (B568, ¶2; B409 p. 36, ll. 2-19; B17 at Col. 1, ll. 27-31). Advanced Mobile Phone System (“AMPS”), Time Division Multiple Access (“TDMA”) and “Global System for Mobile Communications” (“GSM”) are examples of air interfaces (*id.*).

d) The GSM Cellular Protocol

(1) Standalone Dedicated Control Channels (“SDCCH”)

In the GSM cellular protocols, control channels are called “Standalone Dedicated Control Channels” (“SDCCH”) (B570, ¶2; B464 p.354, l. 19 – p. 356, l. 2). SDCCH channels typically carry control information for, for example, establishing a voice communication link between the cell phone and the network (B570, ¶2; B149 p. 50, l. 21 – p. 51, l. 19; B71 at p. 77, §3.2.3.3; B415, p. 25, ll. 2-25).

(2) Traffic Channels (“TCH”)

In GSM, voice channels are called “Traffic Channels” (“TCH”) (B570, ¶2; B464 at p. 357, ll. 13 – 22). These channels transmit the voice signals that a user generates during a call (B570, ¶2; B464 at p. 357, ll. 13 – 22; B444 at p. 91, l. 16 – p. 92, l. 2; B66 at p. 71, §3.2.2; B95-B95 at pp. 102-103, §2.3.6.1).

(3) Standalone Dedicated Control Channels are not Traffic Channels

In the GSM protocols, Standalone Dedicated Control Channels (“SDCCH”), on the one hand, and traffic channels (“TCH”), on the other hand, are two different types of channels (B570, ¶2; B464 p. 354, l. 19 – p. 357, l. 22; B69 at p. 74; B77-B78 at pp. 94-95, §7.3; B94-B98 pp. 102-106, §§2.3.6.1-2.3.6.2; B87 at p. 58, Table 5.1; B403 p. 103, ll. 14-24, p. 118, ll. 4-13; B128 at p. 113, ll. 5-12; B544 at Slide 7). They are not the same channel (*id.*)

In its opening brief, Andrew claims that it is “undisputed” that an SDCCH channel is necessarily a voice or traffic channel (“TCH”), rather than a control channel, because it can carry a limited form of text messaging (D.I. 148 at pp. 7-8, ¶20, 23). But an SDCCH channel is not a voice or traffic channel (“TCH”) (B570, ¶2; B464 at p. 354, l. 19 – p. 357, l. 22; B69 at p. 74; B77-B78 at pp. 94-95, §7.3; B94-98 pp. 102-106, §§2.3.6.1-2.3.6.2; B87 at p. 58, Table 5.1; B403 p. 103, ll. 14-24, p. 118, ll. 4-13; B128 at p. 113, ll. 5-12; B544 at Slide 7). SDCCH channels do not transmit voice signals (B443-B444 p. 91, ll. 4-6 ; B143, p. 38, ll. 14-18; B150, p. 56, ll. 6-12; B538-B540 at 5-7, §1.7.3) and are not active during a call (B95 at 103, §2.6.3.2).

A Standalone Dedicated *Control Channel* is a control channel (B56 at 95, Col. 1, ¶¶2, 5; B570 at 9, ¶2). Control channels can sometimes carry text messaging (B150 at p. 54, ll. 15-21).

Andrew claims that it is “undisputed” that an SDCCH can carry “traffic” (D.I. 148 at p. 10, ¶32). But an SDCCH cannot transmit “traffic” if “traffic” is defined as voice information that is carried on the traffic channel (“TCH”) (B143, p. 38, ll. 14-18; B149, p. 51, ll. 20-22; 1/11/07 B444 p. 91, ll. 4-6 (include pages 89-91); B149, p. 56, ll. 6-12; B538-B540 at 5-7, §1.7.3; B98 at 103, §2.6.3.2).

Andrew claims that it is “undisputed” that a Standalone Dedicated Control Channel is not a control channel because it “communicates more than signaling information” such as text messages (D.I. 148 at p. 10, ¶32). But text messages are sometimes considered “signaling

information” when they transmitted over a signaling channel. The GSM periodicals that Andrew has offered explain that SDCCH channels carry “only signaling traffic” (B98 at 106, ¶2).

(4) Standalone Dedicated Control Channels Are One Way Channels

Some Standalone Dedicated Control Channels carry information from a cellular telephone to a cell site, but not from a cell site to a cellular telephone (B569-B570 at p. 8, ¶4 – p. 9, ¶2; B94 at p. 102, §2.3.6). Some Standalone Dedicated Control Channels carry information from a cell site to a cellular telephone, but not from a cellular telephone to a cell site (B569-B570 at p. 8, ¶4 – p. 9, ¶2).

In its opening brief, Andrew claims that it is “undisputed” that an “SDCCH is not a reverse channel” (D.I. 148 at pp. 9-10, ¶31). But the SDCCH channels that carry information from a cell phone to a cell site and that are the subject of TruePosition’s infringement allegations are reverse channels (D.I. 148 at pp. 9-10; 31; B569-B570 at p. 8, ¶4 – p. 9, ¶2; B126-B127 at p. 68, l. 5 – p. 71, l. 23; B415, p. 25, ll. 11-14; 1/15/07 Goodman Tr., 97: 19-21).

In its opening brief, Andrew claims that it is “undisputed” that an SDCCH is a “two way channel” (D.I. 148 at pp. 9-10, ¶31). But, while it is true that Standalone Dedicated Control Channels can carry information in both the forward and reverse directions, each individual SDCCH is a one way channel (B569-B570 at p. 8, ¶4 – p. 9, ¶2; B94 at p. 102, §2.3.6).

C. The Patent

1. The Asserted Claims

The 144 Patent contains 45 claims (**Patent at col. 20, l. 4 - col. 28, l. 9**). TruePosition asserts that Andrew infringes Claims 1, 2, 22, 31 and 32 (the “Asserted Claims”) (**Seventh Supplemental Response to Andrew’s Interrogatories** at 10-11). In independent Asserted

Claim 22, the phrase “**reverse control channel**” appears only after the transitional phrase “**comprising**” (B26-B30 at col. 23, l. 56 – col. 24, l. 2). In independent Asserted Claims 1 and 31, the phrase “**reverse control channel**” appears both in the preamble of the claim, before the transitional phrase “**comprising**” is recited, and after the phrase “**comprising**” (B26-B28 at col. 20, ll. 4-34; col. 24, ll. 51-68).

2. The Specification

a) The Cellular Network of the Preferred Embodiment

The patent specification describes a cellular network in which each cell site serves only the cell phones located in the cell that corresponds to that cell site (B2 at Fig. 1C; col. 1, ll. 60-64; col. 2, ll. 23-30). In the preferred embodiment, each cell site is assigned only one “control channel” and multiple voice channels (B17 at col. 2, ll. 14-16; B20 col. 8, ll. 53-54: “*there is only one control channel used per cellular sector or omni cell site*” (emphasis supplied); B322 at p. 47, ¶121). This one “control channel” is called the “‘forward’ control channel” when it is transmitting from a cellular telephone to a cell site (B17 at col. 2, ll. 15-19) and the “‘**reverse control channel**’” when it is transmitting from a cell site to a cellular telephone (B17 at col. 2, ll. 15-19). The patent explains:

In particular, the 21 control channels for “A” systems are numbered 313 through 333 and occupy a 30 KHz band of frequencies 834.390 MHz to 834.990 MHz. . . . Each cell site (or, where a cell site is “sectored” as described below, each sector of that cell site) uses *only a single control channel*. The control channel from a cell site to a mobile unit is called the ‘forward’ control channel and the control channel from the cellular telephone to the cell site is called the ‘reverse’ control channel.

(B17 at Col. 2, ll. 14-19) (emphasis supplied). A cellular telephone uses the cell site with the strongest control channel signal, that is, the nearest cell site, to send control information to the network and receive control information from the network (B17 at col. 1, ll. 60-65; col. 2, ll. 44-

62; B18 col. 3, ll. 17-40). This control information includes information for setting up a phone call, such as, for example, a particular cell phone's telephone number (B18 at col. 3, ll. 33-40). In the cellular network of the preferred embodiment, if the single control channel assigned to a cell site could not communicate information in both the forward and reverse directions, the cellular network could not operate (B17 at col. 1, ll. 60-65; B17 col. 2, ll. 44-62; B18 col. 3, ll. 17-40).

b) The Cellular Telephone Location System of the Preferred Embodiment

The invention of the 144 Patent is a system and method for locating a cell phone user (B18 at col. 3, ll. 63-66) using the transmissions normally emitted by the user's cell phone (B18 at col. 4, l. 36 – col. 4, l. 45, col. 8, ll. 26-29). The system is overlaid on equipment that normally exists in a cellular network (B18 at col. 4, ll. 19-24).

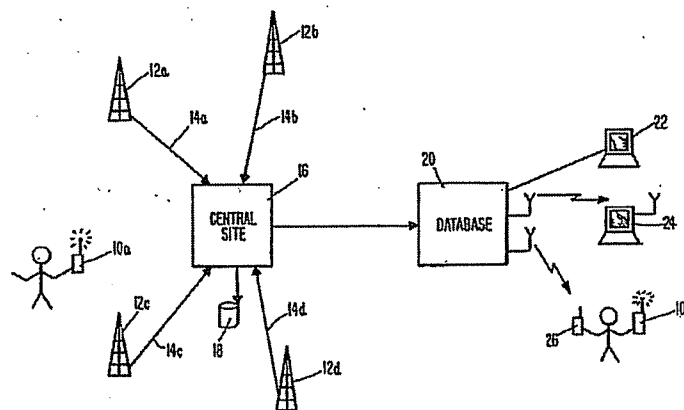


Fig. 2

In the preferred embodiment, the system locates cell phones using a "Time Difference of Arrival" (TDOA) technique (B23 at col. 13, ll. 54-60; col. 14, l. 15-21; B321 at 46, ¶118). Once the cell phone user is located, the system of the preferred embodiment writes the user's location, as well as information that was transmitted over the control channel, such as, for example, the

located cell phone's telephone number, to a database (B23 at col. 13, l. 63 – col. 14, l. 5; col. 3, ll. 33-40; col. 8, ll. 36-41). The system may then send this same control channel information, such as the cell phone's telephone number, to a user of the system in a “coded message” (B23 at col. 13, l. 65 – col. 14, l. 15).

c) The Patent File History

The application that led to the patent was filed on May 7, 1993. The United States Patent and Trademark Office initially rejected some of the pending claims in view of certain prior art (**Song**). The PTO asserted that the Prior Art disclosed locating cell phones using “control channels” (*id.*). In response, the inventors amended the pending claims to specify that the system located cell phones using signals sent over “**reverse control channel(s)**” (B34). In their remarks to the Patent Office, the inventors explained that they amended the claims to specify that their system locates cell phones using *transmissions* sent from a cellular telephone to a cell site (B46). They asserted:

With regard to claim 1 . . . the claimed invention is clearly limited to a system employing reverse control channels signals, *i.e.*, control channel *signals from the mobile telephones*. This limitation is expressed not only in the claim's preamble but also in the body of the claim.

By contrast, the prior art location system located cell phones using signals that a cell site sends to a cellular telephone:

It should be noted that [the Prior Art] stresses that his system is specifically designed for use in making strength/distance determinations on the basis of forward *signals from the base stations*, as opposed to reverse signals from the mobile phone, and further that it is actually not specifically adapted for use in making such strength/distance determinations on the basis of control channel signals, as opposed to voice channel signals.

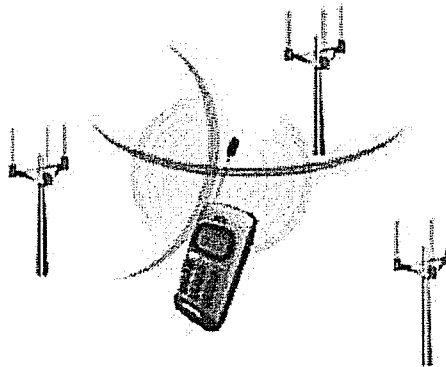
(*id.*) Nothing in the file history suggests that the inventors disclaimed “two way” channels. The

PTO awarded the patent to TruePosition's predecessor on July 5, 1994.

D. The Accused Product

Like the 144 patent, Andrew's Geometrix system locates cell phones using the transmissions normally emitted by the user's cell phone. The Geometrix "Positioning Determining Entity" ("PDE") is overlaid on equipment that normally exists in a cellular network (B576, B580 at 15, ¶¶1-3, 19).

Geometrix locates cell phones using a "Time Difference of Arrival" (TDOA) technique (B573-B573 at pp. 11-12; B423 at p. 131, l. 14 – p. 132, l. 14). Andrew's internal documents concerning the operation of Geometrix explain how TDOA works using the following illustration:



The U-TDOA¹ technique works by measuring the exact time of arrival of a radio signal at three or more separate cell sites. Because radio waves travel at a fixed and known rate (the speed of light), by calculating the difference in arrival time at pairs of cell sites, it is possible to calculate hyperbolas on which the transmitting device is located. As seen in the figure, measurements at two pairs of cell sites (for example, sites 1&2 and sites 1&3) create two intersecting hyperbolas indicating the location of the transmitting device.

¹ "U-TDOA," or Uplink Time Difference of Arrival, is another name for TDOA (B408, p. 12, l. 8 – p. 13, l. 15).

(B525; B572-B573 at 11-12; PX-218 at pp. 24-25; B427 at p. 31, l. 7 – p. 33, l. 22).

When installed in a GSM cellular network, Andrew's equipment can locate on cell phone signals sent over two types of channels (B466 at 2; B402-B404, p. 101, l. 4 – p. 104, l. 6, p. 118, ll. 4-13). When a cell phone user is not on a phone call, Geometrix locates the phone using its transmissions on a Standalone Dedicated Control Channel ("SDCCH") (B466 at 2; B538 at AND007141). When a cell phone user is on a phone call, Geometrix locates the phone using its transmissions on a traffic channel ("TCH") (B466 at 2). Once the system locates a cell phone user, it may write the user's location, as well as control information, such as a cell phone's telephone number, to a database (B625 at pp. 64, 69, 82, 87; B495 at p. 28; B428 at p. 100, l. 17 – p. 103, l. 20; B447, p. 201, l. 25 – p. 204, l. 19; B451 at p. 427, l. 11 – p. 432, l. 14).²

TruePosition contends that Geometrix is encompassed within the scope of the asserted claims because of its capability to locate cell phones on the Standalone Dedicated Control Channel signals that a cell phone transmits to a cell site (B175 at p. 12, 13, 21, 23, 24, 26, 33, 46, 47, 49, 51, 57, 59, 67, 69). In his expert report, TruePosition's expert, Dr. Oded Gottesman found that Standalone Dedicated Control Channels are **reverse control channels** within the meaning of the claims under TruePosition's proposed construction (B592 at p. 31, 39, 43-44, 53, 61, 65-66, 71, 73, 79, 83, 84, 86, 89, 91).

² On deposition, Dr. Gottesman testified concerning documents relating to Andrew's database that Andrew had withheld until after Dr. Gottesman's report was due (B451 at p. 427, l. 11 – p. 432, l. 1).

IV. ARGUMENT

A. Governing Legal Standards

1. Summary Judgment

A court shall grant summary judgment only if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). The moving party bears the burden of proving that no genuine issue of material fact exists. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 n. 10, 106 S. Ct. 1348, 89 L.Ed. 2d 538 (1986). "Facts that could alter the outcome are 'material,' and disputes are 'genuine' if evidence exists from which a rational person could conclude that the position of the person with the burden of proof on the disputed issue is correct." *See Horowitz v. Fed. Kemper Life Assurance Co.*, 57 F.3d 300, 302 n.1 (3rd Cir. 1995). If the moving party has demonstrated an absence of material fact, the nonmoving party then "must come forward with 'specific facts showing that there is a genuine issue for trial.'" *Matsushita*, 475 U.S. at 587, 106 S. Ct. 1348, 89 L.Ed. 2d 538 (*quoting* Fed. R. Civ. P. 56(e)). The court will "view the underlying facts and all reasonable inferences therefrom in the light most favorable to the party opposing the motion." *Pa. Coal Ass'n v. Babbitt*, 63 F.3d 231, 236 (3rd Cir. 1995). The Court should deny summary judgment if there is "enough evidence to enable a jury reasonably to find for the nonmoving party on that issue." *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249, 106 S. Ct. 2505, 91 L.Ed. 2d 202 (1986).

2. Infringement

Proof of infringement requires two steps, claim construction and claim application. *Seal-Flex*, 172 F.3d at 842. Claim construction is a purely legal issue. *Primos, Inc. v. Hunter's*

Specialties, Inc., 451 F.3d 841, 847 (Fed. Cir. 2006). “A claim interpretation that excludes a preferred embodiment from the scope of the claims is rarely, if ever, correct.” *MBO Labs, Inc. v. Becton, Dickson & Co.*, 2007 U.S. App. LEXIS 1470, *24 (Fed. Cir. Jan. 24, 2007) (reversing district Court’s grant of summary judgment of non-infringement (*quoting On-Line Techs, Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1138 (Fed. Cir. 2004))).

Application of the claims to the accused product to determine infringement, however, is a question of fact reserved for the jury. *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326 (Fed. Cir. 2006) (“The second step, application of the claim to the accused product to determine infringement, is a question of fact.”). However, as a matter of law, “a party may not avoid infringement of a patent claim using an open transitional phrase, such as ‘comprising,’ by adding additional elements.” *FreeMotion, Inc. v. Cybex, Int’l*, 423 F.3d 1343, 1353 (Fed. Cir. 2005) (reversing district court’s grant of summary judgment of non-infringement)

Where, as here, the record shows a genuine and material conflict arising from the claim application step under the correct claim construction, summary judgment is inappropriate. *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1376 (Fed. Cir. 2006) (vacating grant of summary judgment of non-infringement where patentee “presented sufficient expert testimony on this issue to avoid summary judgment”); *Dorel Juvenile Group, Inc. v. Graco Children's Prods., Inc.*, 429 F.3d 1043, 1047 (Fed. Cir. 2005) (vacating grant of summary judgment of non-infringement because district court “invaded the province of the finder of fact, here a jury requested by [the patentee], in deciding the infringement question”); *AFG Indus. v. Cardinal IG Co.*, 375 F.3d 1367, 1372, 1374 (Fed. Cir. 2004) (vacating grant of summary judgment ‘[b]ecause genuine issues of material fact preclude[d] summary judgment of non-infringement’);

Voice Techs. Group, Inc. v. VMC Sys., Inc., 164 F.3d 605, 612 (Fed. Cir. 1999) (“[F]actual issues of infringement require further development, on the correct claim construction. The grant of summary judgment of non-infringement was in error, and is reversed”).

A patentee is entitled to show infringement in one of two ways. Literal infringement is shown where every element of a properly construed patent claim is found in the accused device or method. *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1308 (Fed. Cir. 2002). But even where literal infringement cannot be shown, infringement may nevertheless be found under the so-called doctrine of equivalents. Proof of infringement under the doctrine of equivalents requires a showing that the differences between the claimed invention and the accused device or method are insubstantial. *Riles*, 298 F.3d at 1309 (“A claim element is equivalently present in an accused device if only ‘insubstantial differences’ distinguish the missing claim element from the corresponding aspects of the accused device”). One way to demonstrate that differences between the claim and accused product are insubstantial is to show that the accused product “performs substantially the same function as the claimed limitation in substantially the same way to obtain substantially the same result.” *Id.* (citation omitted). Infringement under the doctrine of equivalents is entirely fact dependent. *Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co.*, 425 F.3d 1366, 1372 (Fed. Cir. ___) (“[I]nfringement, whether literal or under the doctrine of equivalents, is a question of fact”); *RF Delaware, Inc. v. Pac. Keystone Techs., Inc.*, 326 F.3d 1255, 1266 (Fed. Cir. 2003).

B. There Is Persuasive Evidence of Literal Infringement Under the Legally Correct Construction of the Claims

There is persuasive evidence of infringement under TruePosition’s proposed claim construction. Dr. Oded Gottesman, a source code and radio communications expert, has found that Andrew has infringed the patent by engaging in six different types of commercial activities

in relation to its Geometrix product (**B562-B563**). Using TruePosition's proposed construction of the phrase "**reverse control channels**" (**B567**), Dr. Gottesman found that Standalone Dedicated Control Channels are **reverse control channels** within the meaning of the claims (**B592** at p. 31, 39, 43-44, 53, 61, 65-66, 71, 73, 79, 83,84, 86, 89, 91). Thus material fact issues preclude summary judgment of non-infringement.

1. Standalone Dedicated Control Channels are "Reverse Control Channels"

TruePosition's proposed construction of the phrase "**reverse control channels**" is a "**control channel** from a cellular telephone to a cell site" (D.I. 130 at 2).

There should be no dispute that Standalone Dedicated Control Channels are "**reverse control channels**" under TruePosition's proposed construction. In its opening brief Andrew asserts that these channels can carry information "*from a mobile phone to a base station*" (D.I. 148 at p. 9, ¶31) (emphasis supplied). A "mobile phone" is just another name for a cellular telephone. A "base station" is just a type of "cell site" (B459 at 97:19-21). Therefore, a Standalone Dedicated Control Channel is a channel "from a cellular telephone to a cell site" (B126-B127 at p. 68, l. 5 – p. 71, l. 23; D.I. 149 at 2; B459 Tr. 97:19-21; B415 at p. 25, ll. 1-14; B562 at p. 31; B596 at 35, fn. 87).

Andrew nevertheless wrongly claims that there is no infringement under TruePosition's proposed construction because Standalone Dedicated Control Channels are supposedly "two-way" channels (**D.I. 148 at 1**). But, even if Standalone Dedicated Control Channels were "two way" channels, Andrew's position would contradict both basic logic and fundamental patent law. According to Andrew, there is no infringement since each Standalone Dedicated Control Channel is not only channels from a cellular telephone to a cell site, but also supposedly a channel from a cell site back to a cellular telephone (D.I. 148 at p. 13-14). But if a channel

transmits information in both forward and reverse directions, it necessarily transmits in the reverse directions. .

Andrew's claims also contradicts "basic patent law" which "holds that a party may not avoid infringement of a patent claim using an open transitional phrase, such as 'comprising,' by adding additional elements." *FreeMotion, Inc. v. Cybex, Int'l*, 423 F.3d 1343, 1353 (Fed. Cir. 2005) (reversing district court's grant of summary judgment of non-infringement). In each independent asserted claims, the phrase "**reverse control channel**" appears after the transitional phrase "**comprising**" is recited (B26 at col. 20, ll. 4-34; col. 23, l. 56 – col. 24, l. 2; col. 24, ll. 51-68). In independent Claim 22, the phrase "**reverse control channel**" appears only after the transitional phrase "**comprising**" (B28 at col. 23, l. 56 – col. 24, l. 2). Andrew cannot escape infringement by claiming that, in addition to transmitting information from cell phones as required by the claims, Standalone Dedicated Control Channels also transmit information to cell phones. The fact that SDCCH's transmit from cell phones is sufficient to show infringement.

Facing uncontroverted evidence of infringement under the legally correct construction, Andrew mischaracterizes that construction (D.I. 148 at ¶¶16-17) and offers a declaration from Goodman, who further elaborates to explain that channels are "like streets," some "are one way" and some are "two-way" (A279). But that "street" analogy only proves why "two way" channels are "**reverse control channels**" under TruePosition's proposed construction. Route 95 is a street "from Wilmington to Philadelphia" even though that street also carries traffic from Philadelphia to Wilmington. If a speaker describes a street going "from Wilmington to Philadelphia," the listener would not assume that the street is "one way" and that it cannot also carry traffic from Philadelphia to Wilmington. TruePosition's proposed construction merely requires a channel "from a cellular telephone to a cell site" (D.I. 130 at 2). In the same way that Route 95 is a street

“from Wilmington to Philadelphia,” a two way channel is a channel “from a cellular telephone to a cell site.”

2. Standalone Dedicated Control Channels Are “Reverse Control Channels”

TruePosition’s proposed construction of the phrase “**reverse control channels**” is a “**control channel** from a cellular telephone to a cell site” (D.I. 130 at 2). TruePosition’s proposed construction of the phrase “**control channel(s)**” is a “channel(s) used to transmit control information to and from cellular telephones; not voice channel(s)” (D.I. 130 at 2). Therefore a “**Reverse Control Channel**” is a “channel(s) used transmit control information” from a cellular telephone to a cell site and that is “not [a] voice channel(s).” TruePosition has already shown that Standalone Dedicated Control Channels transmit information from a cellular telephone to a cell site. There is also persuasive evidence that Standalone Dedicated Control Channels are “used to transmit control information” and are “not voice channel(s).”

a) Standalone Dedicated Control Channels Are “Used to Transmit Control Information”

Dr. Gottesman explained that “control channels” are channels “used to transmit control information” (**Gottesman Report at 6**). He explained that Standalone Dedicated Control Channels transmit control information used by GSM cellular telephone networks to set up voice calls:

Control Channels are called “Standalone Dedicated Control Channels (“SDCCH”). The SDCCH provide the classic control channel function of setting up a call, i.e., establishing a communication link between the cellular phone and a cell site.

(B570 at 9, ¶2). He testified that the “function of” SDCCH “control channel transmissions is to convey digital control information” (B593 at 32, 40, 44, 54, 62, 66, 72, 80, 84, 89). He further stated that the result of such transmissions is “a call being set up or digital control information

otherwise being put to use” in the network (B593 at 32, 40, 45, 54, 62, 66, 72, 80, 84, 89-90).

He also offered an IEEE periodical that explained that the “Stand-alone dedicated control channel is used for the transfer of call *control* signaling to an from the mobile during call set up” (B56 at 95, col. 1, ¶5 (Gottesman Exhibit 5) (emphasis supplied)). Mr. Robert Anderson concurs (B149 at p. 51, ll. 5 - 17) as does Andrew’s head of Digital Signal Processing, John Carlson (B415, p. 25, ll. 2-25). The GSM periodicals that Andrew has introduced into evidence also corroborate Dr. Gottesman’s testimony (B71 at p. 77, §3.2.3.3).

A rational juror could conclude on the basis of this evidence that Standalone Dedicated Control Channels are used to transmit control information. At a minimum, the evidence raises a genuine fact issue.

**b) There Is Persuasive Evidence That Standalone
Dedicated Control Channels Are Not Voice Channels**

There is persuasive evidence that Standalone Dedicated Control Channels are “not voice channels.” Standalone Dedicated Control Channels do not carry voice signals that a user generates during a call. Dr. Gottesman explained that a Standalone Dedicated Control Channel “does not transmit voice.” (B443 p. 89, 91, ll. 4-6). TruePosition’s former Chief Technical Officer, Joseph Sheehan, and current Chief Technical Officer, Robert Anderson, concurred. (B143, p. 38, ll. 14-18; B150, p. 56, ll. 6-12). An SDCCH channel is not even active during a phone call. The GSM treatises that Andrew has offered explain that “signaling information is carried between a [phone] and [a base station] using *associated* control channels during a call, while standalone dedicated control channels are employed outside of a call.” (B95 at 103, §2.6.3.2). Andrew added the ability to locate on the SDCCH to Geometrix precisely so that it could locate non-voice transmissions (B538 at 5-7, §1.7.3: SDDCH location “supports geolocation of subscribers using SMS and other non-voice transmissions”).

In GSM, the channel that transmits voice information is called the traffic channel (“TCH”) (B570 at 9, ¶2 10/16/07 B464 at p. 357, ll. 13 – 22; B444 at p. 91, l. 16 – p. 92, l. 2; B66 at p. 71, §3.2.2; B94 at pp. 102-103, §2.3.6.1). A Standalone Dedicated Control Channel (“SDCCH”) is not a traffic channel (“TCH”). (B570 p. 9, ¶2; B464 at p. 354, l. 19 – p. 357, l. 22; B69 at p. 74; B77-B78 at pp. 94-95, §7.3; B94 pp. 102-106, §§2.3.6.1-2.3.6.2; B87 at p. 58, Table 5.1³; B403 p. 103, ll. 14-24, p. 118, ll. 4-13; B128 at p. 113, ll. 5-12; B544 at Slide 7).

A rational juror could therefore conclude that Standalone Dedicated Control Channels (“SDCCH”) are not voice channels because they do not transmit voice signals and because the GSM protocols designate a different channel, the traffic channel (“TCH”), to carry voice signals. At a minimum, the evidence presented raises a genuine issue of material fact.

In its opening brief, Andrew offers evidence purporting to show that an SDCCH is actually a TCH (D.I. 148 at p. 7, ¶¶20-21, 23, p. 14).⁴ But a reasonable juror could find this evidence unpersuasive given the overwhelming evidence to the contrary. Andrew claims that an SDCCH is TCH and not a control channel because of testimony from Robert Anderson that an SDCCH transmits “traffic” (D.I. 148 at 10). But Mr. Anderson later testified that he did not know what traffic information is (B143, p. 38, ll. 14-18; B149, p. 51, ll. 20-22).

³Andrew has offered portions of these GSM materials as authentic technical treatises and periodicals in order to prove the truth of the statements in those texts concerning SDCCH channels (D.I. 148 at pp. 9-10, ¶31). TruePosition may now use other portions of the treatises and periodicals to do the same. Fed. R. Evid. 106.

⁴Andrew cannot rely on the expert report of Dr. Stuart Schwartz (D.I. 148 at pp. 7-8, ¶¶21, 23) an expert that TruePosition retained in contention with the prior litigation between the parties because it is inadmissible hearsay. “Since an expert witness is not subject to the control of the party opponent with respect to consultation and testimony he or she is hired to give, the expert witness cannot be deemed an agent.” See *Kirk v. Raymark Indus.*, 61 F.3d 147, 164 (3rd Cir. 1995) (district court erred as a matter of law in allowing introduction of expert testimony from a prior trial). Dr. Schwartz was not asked to construe the Patent claims in the prior litigation.

Furthermore, a reasonable juror could conclude that a control channel can carry “traffic” in view of Dr. Goodman’s declaration that compares control channels to “streets” (A278-279 at ¶11, (h)-(j)). “Streets” generally carry traffic. A rational juror could conclude that in cellular networks, the word “traffic” can refer to information that is carried on the TCH but also may sometimes refer to other types of information carried on any channel, including control channels (B143, p. 38, ll. 14-18; B149, p. 51, ll. 20-22). Again, the evidence raises a genuine issue material fact at a minimum.

C. Andrew is Not Entitled to Summary Judgment Under Its New Construction

Andrew is not entitled to summary judgment under its new summary judgment construction because that construction is untimely, legally erroneous and, in any event, there is evidence of infringement even under that construction.

1. Andrew’s New Summary Judgment Construction is Untimely

Andrew should not be allowed to seek summary judgment based upon a construction of the claims that differs from the construction set forth in the JCCS. TruePosition was prejudiced by Andrew’s failure to include its new construction in the JCCS. TruePosition did not have the opportunity to brief Andrew’s summary judgment construction of the phrase “**reverse control channels**” in the Opening Claim Construction Brief and must instead do so now. Furthermore, TruePosition does not know which construction Andrew will assert at the Markman hearing.

2. Andrew’s New Summary Judgment Construction Is Legally Erroneous

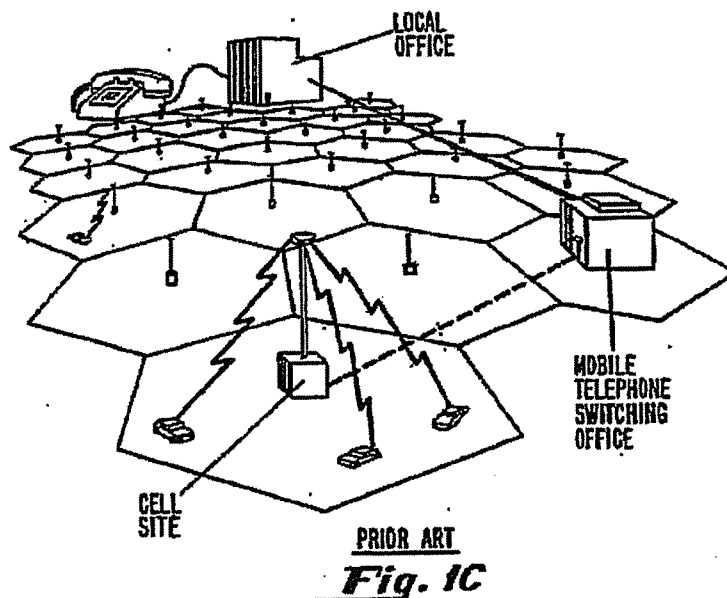
In addition to being late, Andrew’s new summary judgment construction is also wrong.

a) **The Phrase “Reverse Control Channels” Within the Meaning of the Patent Is Not Limited to “One Way” Control Channels**

Andrew’s construction of the phrase “**reverse control channel**” as a “*one way*” channel that is only capable of transmitting information in the reverse direction would exclude the preferred embodiment in the patent specification and also conflicts with the file history. The preferred embodiment of the patent specification describes a “single” two way control channel that is called the “**reverse control channel**” when it is transmitting one way and that is called the “forward control channel” when it is transmitting in the other way. In a passage that describes how a cellular network operates, and also explicitly defines the phrase “**reverse control channel**,” the patent explains:

In particular, the 21 control channels for “A” systems are numbered 313 through 333. . . . Each cell site (or, where a cell site is “sectored” as described below, each sector of that cell site) uses *only a single control channel*. The control channel from a cell site to a mobile unit is called the ‘forward’ control channel and the control channel from the cellular telephone to the cell site is called the ‘reverse’ control channel.

(B17 at Col. 2, ll. 14-19) (emphasis supplied). Andrew’s proposed construction of the phrase “**reverse control channel**” as a “one way” channel that necessarily differs from a “forward control channel” (D.I. 150 at A278-279, ¶¶11(f), (g)) would render this passage nonsensical. Under Andrew’s construction, each cell site in a cellular network would be assigned “only a single” one-way reverse control channel that was incapable of transmitting to cell phones (D.I. 150 at A278-279, ¶¶11(i)) or, in the alternative, “only a single” one-way forward control channel that was incapable of transmitting to the cell site from cell phones (col. 8, ll. 53-54; D.I. 150 at A278-279, ¶11(j); *see also* B20 at Col. 8, ll. 53-54: “there is *only one control channel used per cellular sector* or omni cell site” (emphasis supplied)).



In some “cells” in the network, a phone could send, but not receive, control channel information, since each phone is served by only a single cell site (**Patent at Col. 1, ll. 60-64**). In other cells, a phone could receive, but not send, control channel information. The cellular network of the preferred embodiment could not operate if Andrew’s “one way” reverse control channel was used (B17 at col. 2, ll. 44-62).

That is why the preferred embodiment of the patent specification describes a “single” two way control channel that is “called” the “**reverse control channel**” when it is transmitting one way and that is “called” the “forward control channel” when it is transmitting in the other way (B17 at col. 2, ll. 13-19). The Court should not construe a “reverse control channel” to mean a one way channel that is incapable of transmitting from a cell site/base station to a cell phone/mobile phone. “A claim interpretation that excludes a preferred embodiment from the scope of the claims is rarely, if ever, correct.” *MBO Labs, Inc.*, 2007 U.S. App. LEXIS 1470, at *24 (reversing district Court’s grant of summary judgment of non-infringement (*quoting On-Line Techs, Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1138 (Fed. Cir. 2004))).

The Court should adopt TruePosition's proposed construction, which encompasses both "one way" and "two way" channels from a cellular telephone to a cell site.

Andrew's proposed construction of the phrase "**reverse control channel**" also conflicts with the patent file history. Nothing in the file history suggests that when the inventors added the word "**reverse**" to the claims they disclaimed "two-way" channels. In their remarks to the Patent Office, the inventors explained that they amended the claims to specify that their system locates cell phones using *transmissions sent in the reverse direction* from a cellular telephone to a cell site (B46). They asserted:

With regard to claim 1 . . . the claimed invention is clearly limited to a system employing reverse control channels signals, *i.e.*, control channel *signals from the mobile telephones*. This limitation is expressed not only in the claim's preamble but also in the body of the claim.

(B46). By contrast, the Prior Art location system located cell phones using signals that cell site sends to a cellular telephone:

It should be noted that [the Prior Art] stresses that his system is specifically designed for use in making strength/distance determinations on the basis of forward *signals from the base stations*, as opposed to reverse signals from the mobile phone.

(*id.*) The file history suggests only that the inventors disclaimed location systems that locate phones using transmissions in forward direction, and not that they disclaimed systems that locate on transmissions over "two way" channels. Two-way channels are capable of transmitting signals from a cell phone to a cell site as required by the invention.

Without any support in the intrinsic record for its "*one way*" channel construction, Andrew offers deposition testimony in support of its construction (D.I. 148 at 6-7, ¶18). But the cited testimony merely stands for the unremarkable proposition that a "**reverse control channel**" carries information from a cellular telephone to a cell site (B456 at p. 21, ll. 15-23; B445 at p. 99,

ll. 4, p. 100, l. 24 – 101, l. 2; B136, p. 94, ll.14-19; B156, p. 71, ll. 12-72). No witness testified that “**reverse control channel(s)**” are “one way” channels that “only” communicate information from a mobile to a base station (*id.*)

In fact, the only evidence before the Court that a “**reverse control channel**” carries information “*only*” from a cellular telephone to a cell site is a wholly conclusory declaration that Andrew’s expert authored after his deposition (D.I. 150 at A278-279, ¶11(i)). To the extent that the Court is inclined to consider that declaration, TruePosition notes that Dr. Brian Agee testified that he agreed with TruePosition’s proposed construction of the phrase “**reverse control channel**” and the phrase “control channel” (157 at 170, l. 20, 171, l. 4) B158). There is thus a conflict of evidence on this point.

b) **The Phrase “Reverse Control Channels” Within the
Meaning of the Patent Is Not Limited to Control
Channels Carrying Only Signaling Information**

Andrew’s construction of the phrase “**reverse control channel**” as a channel that communicates “*only*” signaling information and that cannot transmit data that can be provided to users in text messages would also exclude the preferred embodiment in the patent specification. In the preferred embodiment, once the cell phone user is located, the system writes the user’s location, as well as information that was transmitted over the control channel, such as the located cell phone’s telephone number, to a database (B23 at col. 13, l. 63 – col. 14, l. 5; col. 3, ll. 33-40; col. 8, ll. 36-41). The system then sends this same control channel information, such as the cell phone’s telephone number, to a user of the system in a “coded message” (B23 at col. 13, l. 65 – col. 14, l. 15). The Court should not construe a “**reverse control channel**” to mean a channel that communicates “*only*” signaling information as opposed to data that is provided to users in text messages, since doing so would exclude the preferred embodiment. *MBO Labs, Inc. v.*

Becton, Dickson & Co., 2007 U.S. App. LEXIS 1740, at *24.

To support its proposed construction of the phrase “**reverse control channel**” as a channel that carries “only signaling” information, Andrew offers the testimony of Robert Anderson (D.I. 148 at 7). But Mr. Anderson merely testified that the “control channels” that *TruePosition’s product* uses for cell phone location carry “only signaling” information (B124, p. 40, l. 2 – p. 42, l. 7). Andrew’s counsel did not ask Mr. Anderson about the meaning of the patent (*id.*) To the extent that the Court is inclined to consider Mr. Anderson’s testimony on the issue of claim construction, it should consider his testimony concerning the 144 Patent, not his testimony about TruePosition’s product. In the relevant context, Mr. Anderson testified that Standalone Dedicated Control Channels are “**control channels**” within the meaning of the patent (B129, p. 209, l. 18 – p. 211, l. 24).

Andrew also offers the conclusory declaration of its expert in support of its “only signaling” information construction (D.I. 150 at A278-279, ¶11(c)). But Dr. Brian Agee testified to the contrary that he agreed with TruePosition’s proposed construction of the phrase “**reverse control channel**” and the phrase “**control channel**” (B157 (170, l. 20, 171, l. 4) B158 Ex. 7). Dr. Gottesman also explained that control channels can be ideal for carrying limited forms of user messaging since they transmit at much lower bit rates than voice channels that carry large amounts of voice data (B444 at p. 90, l. 13 – p. 91, l. 11). Joseph Sheehan, TruePosition’s Chief Technical Officer, concurred (B142 p. 36, ll. 19-23). Thus there is substantial evidence contradicting Andrew’s argument. Factual issues preclude summary judgment.

c) **The Phrase “Reverse Control Channels” Within the Meaning of the Patent Is Not Limited to Control Channels Shared Simultaneously by Multiple Phones**

The Court should also reject Andrew’s claim that the phrase “**reverse control channel**” should be construed to mean a “shared” channel. Andrew originally included this “shared” channel limitation in its “preliminary” proposed construction of the claims served on November 22 (D.I. 144 at A223). But later, on deposition, its expert did not include the limitation in his “preliminary construction” of “**reverse control channel**” (B460), and the limitation was also absent from Andrew’s JCCS construction (D.I. 130 at 2). Now, Andrew has resurrected the “shared” channel limitation on summary judgment. According to Andrew, a “shared” channel is a channel “that has a many to one property in that many mobile phones are simultaneously allocated to and use the same reverse control channel” (D.I. 148 at 8, ¶25).

There is no useful evidence before the Court to support Andrew’s proposed construction. Andrew offers a conclusion from its expert that “**reverse control channel(s)**” are “shared” channels (D.I. 150 at A279, ¶11(l)). But again, Dr. Brian Agee agrees that TruePosition’s proposed construction is correct (B157 (170, l. 20, 171, l. 4) B158 Exhibit 7).

3. **There is Persuasive Evidence of Literal Infringement Under Andrew’s New and Legally Erroneous Construction of the Patent Claims**

a) **There is Persuasive Evidence that Standalone Dedicated Control Channels That Andrew Uses are “One Way” Channels**

Even if Andrew’s new construction were correct, Andrew would still not be entitled to summary judgment. There is persuasive evidence that the Standalone Dedicated Control Channels that TruePosition has identified as “**reverse control channels**” are in fact one way channels that can only communicate information from a cellular telephone to a cell site.

As Dr. Gottesman has explained, the GSM protocols define each Standalone Dedicated Control Channel as either a forward channels, or a reverse channel, but not as a channel that carries information in both directions. He explained that in GSM, all “channels are defined as time slots within a frequency” (B569 p. 8, ¶4) and that SDCCH channels are no exception in that they assume the frequencies assigned to the network (B570 at 9, ¶¶1-2). He further explained that some of these frequencies carried information in the reverse direction, while others carried information in the forward direction, but none carried information in both directions (B569 at p. 8, ¶5). He provided a table illustrating these frequencies, including the frequencies for those GSM networks that Andrew has used to infringe the Patent(B570, fn. 6):

System	Band	Uplink	Downlink	Channel Number
GSM 400	450	450.4 - 457.6	460.4 – 467.6	259 - 293
GSM 400	480	478.8 - 486.0	488.8 – 496.0	306 - 340
GSM 850	850	824.0 - 849.0	869.0 - 894.0	128 - 251

(B569-B570). The table showed that, for example, in a “GSM 400” network, frequencies “450.4 [mHz] – 457.6 [mHz]” carry information in the reverse/uplink direction, while frequencies “460.4 [mHz] – 467.6 [mHz]” carry information in the forward direction, but no frequencies carried information in both directions (*id.*).

A rational juror could conclude that since these frequencies define each individual SDDCH channel, those channels carry information in the reverse direction, or the forward

direction, but not in both directions. The only evidence to the contrary is a conclusion expressed in Goodman's declaration (D.I. 150 at A278-279) and a number of GSM periodicals that show SDCCH channels are capable of sending information to and from a cell phone (D.I. 148 at pp. 9-10, ¶31). The GSM periodicals are not inconsistent with the proposition that some SDCCH channels are one way channels carrying information in the forward direction, while others are one way channels carry information in the reverse direction. At a minimum, Dr. Gottesman's testimony raises a genuine fact issue.

b) There Is Persuasive Evidence That Standalone Dedicated Control Channels Carry Only Signaling Information

Andrew claims that a Standalone Dedicated *Control Channel* is not a "**control channel**" within the meaning of the Patent claims because "**control channels**" carry only signaling information while Standalone Dedicated *Control Channels* can carry text messaging (D.I. 148 at p. 10, ¶32; pp. 14-15). But a rational juror could conclude that such text messaging is "signaling information" when it is sent over a signaling channel such as the Standalone Dedicated Control Channel. Indeed, Andrew has offered a GSM periodical that explains that "the SDCCH always carries signaling traffic" (B98 at 106, ¶2). At a minimum, this evidence raises a genuine fact issue.

Whatever meaning the Court ascribes to the phrase "**control channel**," the GSM protocol's classification of an SDCCH as "control channel" raises a genuine fact issue as to whether it is a "**control channel**." The people who developed the GSM protocols were presumably people who knew about cellular telephone systems and they accurately named Standalone Dedicated *Control Channels* (B56 at 95, Col. 1, ¶¶2, 5). Dr. Gottesman confirmed that they accurately named SDCCH channels as control channels (B570, ¶2).

Andrew has offered a declaration of its expert that “channel names are a shorthand and cannot be assumed to completely reflect each property of a channel” (D.I. 150 at A278-279 at ¶11(a)). But a rational juror could choose not to credit this declaration. During discovery, for example, Andrew admitted that GSM channel names actually *defined* the properties of GSM channels (B255 at 2): “by definition, a Standalone *Dedicated* Control Channel is . . . a *dedicated* communications channel between a *single* mobile phone and a base station” (emphasis original). At a minimum, the evidence raises a genuine issue of material fact.

D. Andrew Is Not Entitled To Summary Judgment Under the Construction That It Advanced in the Joint Claim Construction Statement

Andrew’s Proposed Construction of the Claims set forth in the Joint Claim Construction Statement is also legally erroneous for the reasons set forth in TruePosition’s Opening Claim Construction Brief (D.I. 142 at 10-11). In the JCCS, Andrew proposes that the phrase “**reverse control channel**” should be construed to mean a “[1] channel that carries only signaling information [2] from a mobile terminal to a base station [3] in the format specified in ANSI 553” (D.I. 130 at 2).

a) There Is Persuasive Evidence that Standalone Dedicated Control Channels Carry Only Signaling Information

TruePosition has demonstrated that a rational juror could conclude that a Standalone Dedicated Control Channel carries “only signaling information” in section IV, C, 3, b) above and that a minimum the evidence raises a genuine fact issue.

b) There Is Uncontroverted Evidence That Standalone Dedicated Control Channels Carry Information “From a Mobile to a Base Station”

TruePosition has demonstrated there is uncontroverted evidence that a Standalone

Dedicated Control Channel is a channel “from a mobile terminal to a base station” in section IV, B, 1 above. At a minimum, there is a genuine fact issue.

c) Andrew has Not Carried Its Burden of Pointing Out How The “Format Specified in ANSI 553” Differs from the Format of Standalone Dedicated Control Channel Signals

Andrew has not shown how the signaling “format specified in ANSI 553” supposedly differs from the digital data format that Standalone Dedicated Control Channels use to transmit data. Instead, on summary judgment it appears to have abandoned its claim that the Court should read the signaling “format of ANSI 553” into the claims. Neither of the “three characteristics” of “**reverse control channel(s)**” that Andrew relies upon on summary judgment require a specific digital data format. Therefore, even assuming that the Court were to adopt Andrew’s JCCS construction of the claims, Andrew would not be entitled to summary judgment in that even either. *See Exigent, Inc. v. Atrana Solutions, Inc.*, 442 F.3d 1301, 1309 (Fed. Cir. 2006) (to discharge its burden on a summary judgment of non-infringement the accused infringer must point “to the specific ways in which [the] accused systems [do] not meet the claim limitations”).

E. Even if There Were No Literal Infringement Under Any One of Andrew’s Proposed Constructions, There Is a Genuine Fact Issue Concerning Infringement Under The Doctrine of Equivalents

Finally, there would be a fact issue even if the Court were to construe a “**reverse control channel**” to mean a (1) “one way” channel, (2) a channel that carries “only signaling information,” (3) a “shared” channel, or (4) a channel that uses the signaling “format of ANSI 553.” In addition to finding that Andrew literally infringes, Dr. Gottesman performed a doctrine of equivalents analysis and has found infringement by equivalents (B592-B593 at 31-32). To the extent that Andrew claims Dr. Gottesman’s analysis no longer applies in view of Andrew’s post expert report constructions, because Andrew has changed its claim constructions, Dr. Gottesman

should be given the opportunity to further consider infringement under the doctrine of equivalents. Fed. R. Evid. 56(f).

Andrew claims that TruePosition is precluded as a matter of law from asserting equivalents under the doctrine of equivalents (D.I. 148 at 16-18). But if the Court adopted any one of Andrew's proposed constructions, they would be tangential to the inventor's purpose in amending the claims to require "**reverse control channels.**" In their remarks to the Patent Office, the inventors were clear that the reason they amended the claims was to specify that their system locates cell phones using *reverse transmissions* sent from a cellular telephone to a cell site (B46-B47). Nothing in the file history suggests that they disclaimed "two way" channels, since such channels are capable of transmitting reverse transmissions. Nor does anything in the file history suggest that the inventors disclaimed control channels that carry information other than "signaling information," "shared" channels or channels that carry data in the "signaling format of ANSI 553." The cellular telephone system operates in the same way irrespective of whether the signals that it receives are also employed for text messaging, are carried on a "shared" channel or are transmitted in a particular digital data format.

V. CONCLUSION

Regardless of which of Andrew's claim constructions one analyzes, the same result follows. A genuine issue of material fact precludes award of summary judgment of non-infringement. For the foregoing reasons Andrew's motion for summary judgment of non-infringement should be denied.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, James D. Heisman, hereby certify that on this 20th day of February, 2007, I caused a true and correct copy of the foregoing **TRUEPOSITION'S BRIEF IN OPPOSITION TO ANDREW'S MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT** to be served upon the following individuals in the manner indicated below:

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